



## The River Mile Expansion Workshop July 16-20, 2012

### Pre-workshop Experiences/Requirements

- A) Webinar Introduction
  - a. Welcome and Introduction to Workshop
  - b. The River Mile Program Overview
  - c. Assignment #1
- B) Field Investigations Webinar
  - a. Pre-recorded
  - b. Assignment #2
  - c. Conference call July 9th
- C) Complete pre-survey assessment

### Day 1 Monday July 16, 2012

- 7:30 Registration and breakfast
- 8:00 **Welcome, logistics—Grand Coulee Dam Middle School Safety**
- 8:15 Habitat Observation (a Descriptive Field Investigation)
- 9:45 NatureMapping Intro
- 10:15 Habitat Observation Field Visit to Crescent Bay Lake
- 11:45 Reports and Answer “What is it?”
- 12:15 Load and drive
- 1:00 Fisheries and Wildlife—Ken Hyde
- 1:45 Changes of the river: water quality, river vs reservoir--Brian Crossley
- 2:45 Break
- 3:00 Field data compilation
- 3:30 Introduction to ArcGIS On-line Maps and data export
- 5:30 Dinner—BBQ
- 6:30 Canoe Paddle Inquiry on Crescent Bay Lake
- 8:30 Reflection and Journals

### Day 2 Tuesday July 17, 2012      “Soil-Water Connections”

- 8:00 **Morning Opening**
- 8:15 **Soils Basics—Stacey**
- 9:30 **Water** Resources and watersheds and Water sampling –Charlie Kessler
- 10:15 Break
- 10:30 Introduction to equipment and tests for water
- 11:00 **“Water Quality in the Upper Columbia River & Lake Roosevelt”**
  - a) **Water Quality Unit Introduction**

- b) **Explore Lesson 7: Point & Non- Point Source Pollution: The water land connection**
- 12:30 Water Quality lesson continued
- 1:30 Group Lesson Rotations
  - a) Group A Water Tests (Janice and Charlie)
  - b) Group B Soils Tests (Stacey)
  - c) Group C Vegetation Coverage (Ken Hyde)
- 5:00 End return to school turn in materials, etc.
- 6:30 Jack Nisbet History of the Columbia River—Cultural etc. Jack Nisbet (45 min)
- 7:30 Reflection and Journaling

### **Day 3 Wednesday July 18, 2012**

- 8:00 Intro to the Day
- 8:10 GPS/GIS with Greg Behrens
- 9:15 Question types and Field Investigations—Prof. Nitta
- 10:00 Break
- 10:15 Equipment Overview
- 10:45 Aquatic Macro Invertebrates – Brook Beeler
- 12:30 Site Mapping of Crescent Bay
- 2:00 Compile site mapping data--Computers
- 2:30 ArcGIS: Make maps of site mapping information
- 4:00 Best Practices Sharing
- 5:00 Reflection
- 6:30 Field Investigation Design

### **Day 4 Thursday July 19, 2012**

- 8:00 Field Investigation Development continued
- 9:00 Conduct Field Investigations
- 1:00 Reports
- 2:00 Inquiry Field Investigation Student program Instructions:
- 2:30 Best Practices
- 3:00 Break
- 3:15 Assessment Discussion
- 3:45 Crayfish Study
- Evening: Work on individual school plans

### **Day 5 Friday July 20, 2012**

- 8:00 Implementation, resources, support
  - Bioaccumulation
  - The bigger picture, both Columbia River Watershed and globally. Air, water and soil transport.
  - “Earth Watch Expedition”
- 10:00 Report of their draft plan for their site
- 11:00 Assessment Activities
- 12:00 End**